CHAPTER 32

# Essentials of Web Page Design

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Consistency

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Are you ready to design a page? How you design your page is a *tactical decision*, which this chapter covers.

Your page design must be focused to contribute the feelings you want your visitors to have about your site. It needs to incorporate consistency, predictability, navigability, and a clear purpose with visual appeal and interactivity. When you finish this chapter, you'll be ready to start designing your content.

## What's in a Page?

The first thing you must do is decide what you want to communicate in each page. As you break your text into separate thoughts, a process referred to as chunking, the result will be a number of pages. Each page will contribute in some way to the overall goal of your site, either directly or indirectly.

Figure 32-1 shows a diagram of a listing page.

What needs to be in a page? Generally, you want all your pages to have certain items. These include the following:

- The name of the organization or person publishing the page. Remember, with search engines indexing your site, someone can jump into the middle of your site. If you don't say who you are on every page, visitors may not know.
- A way to get to your Welcome page. This follows from the previous one. Don't assume everyone coming to your site is coming through the front door.

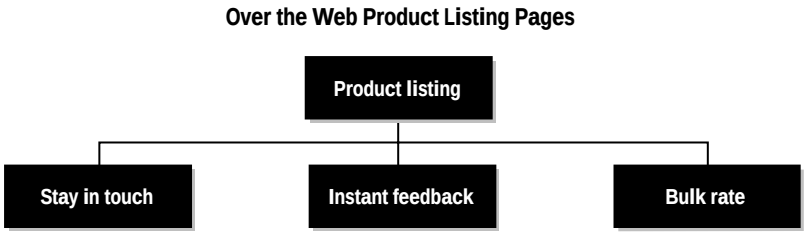


**Figure 32-1:** A detail from the fully developed Over the Web site map

Other optional elements include the following:

- ✦ Your logo
- ✦ How to contact you
- ✦ A navigation bar or navigation buttons
- ✦ A link to a table of contents
- ✦ A link to a site search page
- ✦ A link to a site map
- ✦ A drop-down list of places to go
- ✦ Content, if a terminal page
- ✦ Links to a group of pages, if a links page

# Focusing on Your Message

Now that you have a page-size morsel of information, you should have an idea of what the message of that page is. If you don't know, consider how it fits into the site. If you don't think it contributes to the overall goals of the site in some way, drop it.

Everything you put on your page should contribute in some way to communicating your message. One of the secrets of creating consistent, easily navigated, visually appealing, compelling sites is to limit the amount of content on each page.

## Keeping it to the point (your left brain)

Your message needs to be short and sweet. If you find you have too many different things to communicate in your page, take one of three actions:

1. **Unless your page is a *terminal page*, you can group related material and link to it.** Be careful about adding too many layers of linking pages, though. Whenever possible, group your links so even though the list of links might be long, your visitors can still find what they want relatively easily. The nicest way to do this is by using dynamic HTML, which is discussed in Part VII. The next best thing is to give a list of the groups of links on your page at the top of your page and then use internal links (remember learning about them in Chapter 3?) to jump within your page to the group of links associated with the short list.
2. **Decide what is important and forget about the rest.** You keep reading this, don't you? Simply too much information is on most sites. Unnecessary information does not help your visitor understand your message. Unnecessary information just clutters.
3. **Break your material into more than one page.** We put this last because if you've broken your material into separate thoughts (chunking) and you still think you have too much to put into one page, then you probably have material that isn't well suited to hypertext. Or, you have material that will be printed, and your visitors will appreciate you not breaking up your material if they plan to print it.

**Definition**

Terminal page. A terminal page is a page whose primary function is to provide content, rather than to provide links. This is what your visitors came for: content. Your site is composed of a Welcome page, linking pages, and terminal pages. You can visualize the Welcome page as the root of a tree, the linking pages as the trunk and branches, and the terminal page as the leaves.

## Go with the feeling (your right brain)

What kinds of thoughts and feelings do you want to convey with your page? What adjectives do you want people to use when they describe your site? Your page design will evoke certain feelings in your visitor, even if you don't want it to do this. What kinds of feelings do you get from each of the following?

- White background with black text, Helvetica font
- Cream background with brown text, brush script font
- Cool gray background with burgundy and black lines breaking up the black text, font that looks like printing
- Tan background, forest green text, mustard-colored lines and accents

Your colors, accents, graphics, and text style and size can all contribute to your message. They make an impression on your visitors whether or not you intend them to do so. Don't take shortcuts here.

## When to ask for help

If, after reading through this chapter, you decide you are simply not a *designer,* and many of us are not, then hire someone to provide just the *look* of the page. You can do everything else with the HTML; your designer can just create the style sheet and the graphics. This is too important to take shortcuts.

How do you find a good designer? Surf the Web. If you find a site that rings your bell, write to the Webmaster and find out who designed it. Designers each have their own looks. Find a designer who has the look you want. Professional designers often leave their signatures on the site, as an artist signs a painting. Look for this. Explain that you will create the site and all you are looking for is the design work. It won't cost that much. The labor-intensive part is creating and maintaining the HTML.

One respected professional Web designer, Tamra Heathershaw-Hart, had this to say about the costs of creating versus maintaining a Web site: "I've found that for most 20-page sites, graphic design (and the management of getting the design) takes 50 percent of the cost. Another 30 percent is HTML and production, and 20 percent is for content creation. Because graphics are so subjective (unlike a typo), there's a lot of overhead in the graphics production process. It also usually takes 4–6 weeks to get a design from first meeting to HTML comps—producing the pages is quick once that's all done."

## Lead me not into temptation

It's easy to get distracted from the message of your page when you start thinking about graphics, fonts, colors, animations, and so forth. You need to balance these competing interests. The HTML 4 Way helps relieve you of this temptation. You can actually separate your right-brain work (design) from your left-brain work (content and structure) by using style sheets.

To help you stay focused, settle on your design and *move on.* Commit to a design and don't go back and fiddle with it. You can easily change the style sheet later, but you will have more work if you change the basic design. The best way to avoid the constant temptation to add nice-looking things to your site is to divide the work of your site between two people or teams. This way the person responsible for the content won't get off track. And, most important, the site will be finished—at least for a moment! Later in this chapter, we give some attention to the myth of Web site completeness. You will be relieved to know you aren't the only one who feels like your site is never done.

# The Shell Game

Is there any good way to assure consistence, predictability, and easy navigation from all the pages of a site? You bet! Use a shell. Your page has basically three types of pages:

1. A Welcome page
2. Links pages
3. Terminal pages

Each of these three types of pages requires a slightly different design. Page shells — or templates — provide the consistency you need.

The word *shell* is more accurate than the word *template* because templates traditionally have formatting information in them. Because The HTML 4 Way pulls all this formatting out, what is left is a shell of a page. Look at the three screen captures, shown in Figures 32-2, 32-3, and 32-4. They show the page design for each of the three types of pages for this site. Wouldn't it be easy to create a great-looking site if you could insert your content into shells that looked like this?

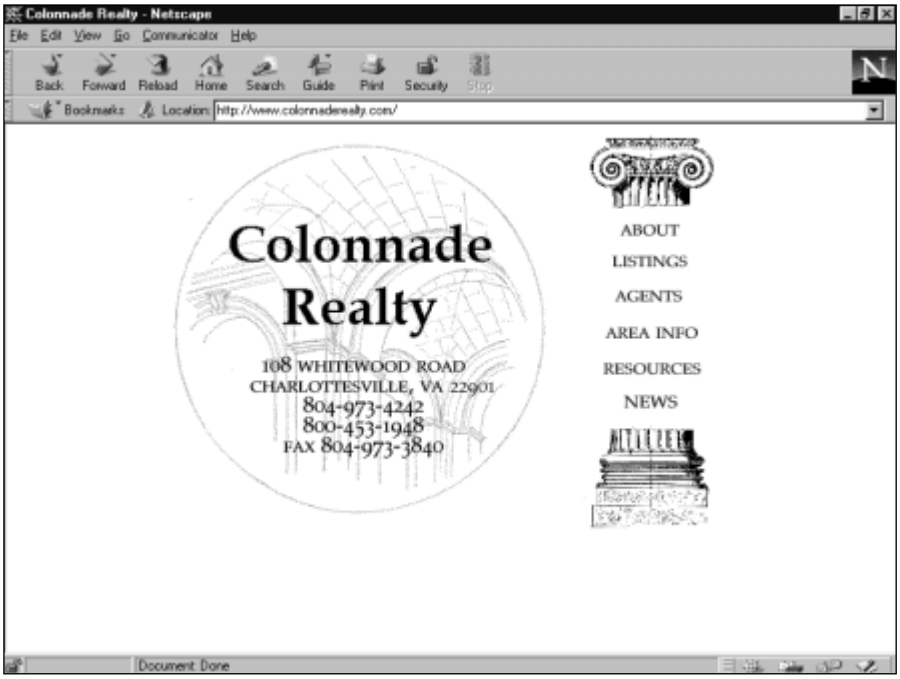


**Figure 32-2:** This Welcome page isn't really a shell, because there will only be one, but it is consistent with the design of the rest of the site.

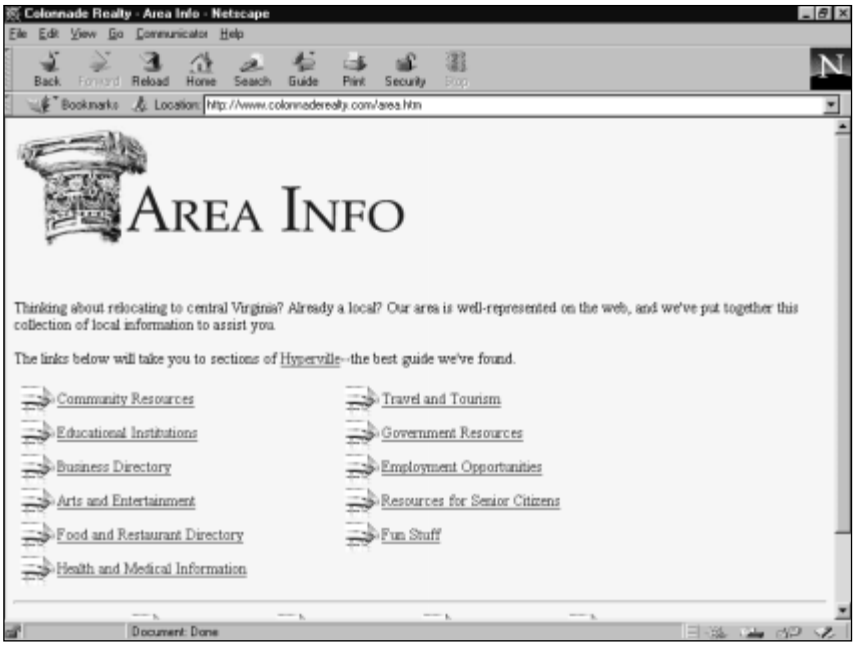
Colonnade Realty - Area Info - Netscape
File Edit View Go Communicator Help
Back Forward Reload Home Search Guide Print Security Stop
Bookmarks Location: http://www.colonnaderealty.com/area.htm
AREA INFO
Thinking about relocating to central Virginia? Already a local? Our area is well-represented on the web, and we've put together this collection of local information to assist you.
The links below will take you to sections of Hyperville--the best guide we've found.
Community Resources
Educational Institutions
Business Directory
Arts and Entertainment
Food and Restaurant Directory
Health and Medical Information
Travel and Tourism
Government Resources
Employment Opportunities
Resources for Senior Citizens
Fun Stuff
Document: Done

**Figure 32-3:** Links pages share the look of the Welcome page.

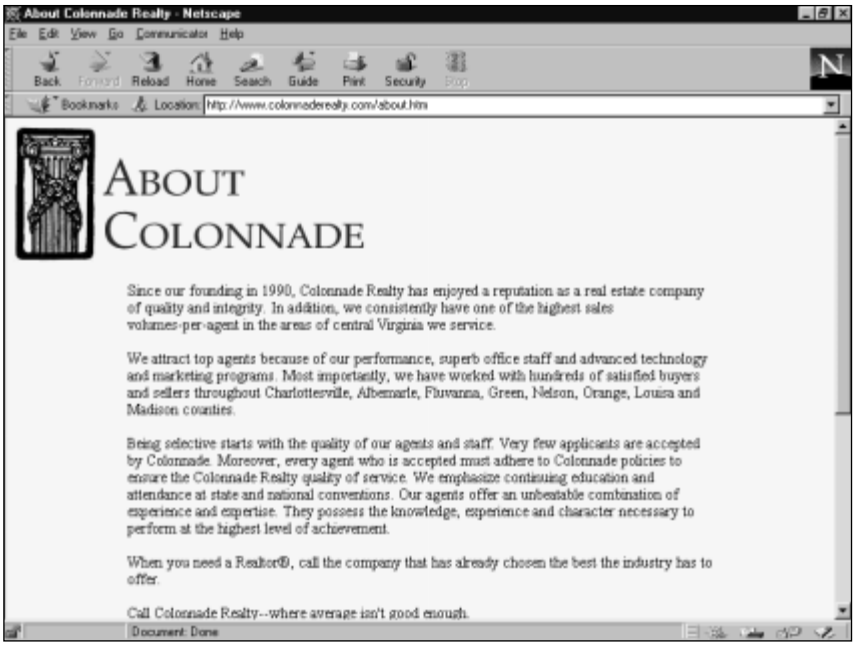
About Colonnade Realty - Netscape
File Edit View Go Communicator Help
Back Forward Reload Home Search Guide Print Security Stop
Bookmarks Location: http://www.colonnaderealty.com/about.htm
ABOUT COLONNADE
Since our founding in 1990, Colonnade Realty has enjoyed a reputation as a real estate company of quality and integrity. In addition, we consistently have one of the highest sales volumes-per-agent in the areas of central Virginia we service.
We attract top agents because of our performance, superb office staff and advanced technology and marketing programs. Most importantly, we have worked with hundreds of satisfied buyers and sellers throughout Charlottesville, Albemarle, Fluvanna, Green, Nelson, Orange, Louisa and Madison counties.
Being selective starts with the quality of our agents and staff. Very few applicants are accepted by Colonnade. Moreover, every agent who is accepted must adhere to Colonnade policies to ensure the Colonnade Realty quality of service. We emphasize continuing education and attendance at state and national conventions. Our agents offer an unbeatable combination of experience and expertise. They possess the knowledge, experience and character necessary to perform at the highest level of achievement.
When you need a Realtor®, call the company that has already chosen the best the industry has to offer.
Call Colonnade Realty--where average isn't good enough.
Document: Done

**Figure 32-4:** Terminal pages carry out the same design theme.

# Consistency

You want to make sure your entire site has the same look. Not just in the big picture, but in the details. Fortunately, style sheets can help you here. You can assure that all your paragraphs have the same level of indentation and the same amount of white space above and below them.

As a Webmaster, you do have to make sure everyone developing content for your site understands when to use the paragraph element and when to use the blockquote element. Veteran Web developers have had to use a lot of tricks in the past to get paragraphs to look nice; one of these tricks was using the blockquote element to format paragraphs. This is a habit you should help them break.

Figure 32-5 illustrates the problem of distinguishing one from the other.

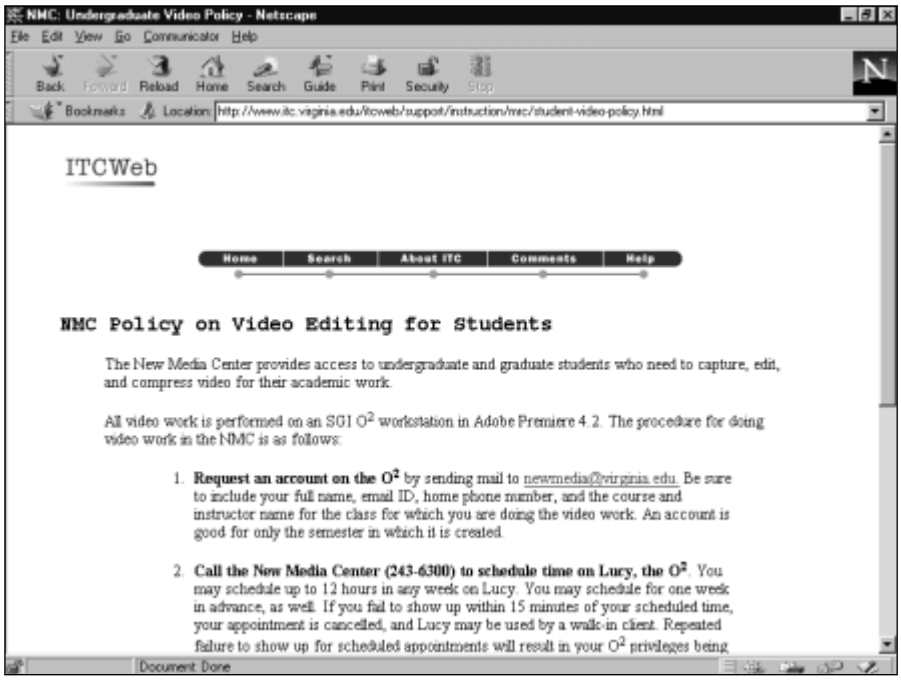
NMC: Undergraduate Video Policy - Netscape
File Edit View Go Communicator Help
Back Forward Reload Home Search Guide Print Security Stop
Bookmarks Location http://www.itc.virginia.edu/itcweb/support/instruction/nmc/student-video-policy.html
ITCWeb
Home Search About ITC Comments Help
NMC Policy on Video Editing for Students
The New Media Center provides access to undergraduate and graduate students who need to capture, edit, and compress video for their academic work.
All video work is performed on an SGI O2 workstation in Adobe Premiere 4.2. The procedure for doing video work in the NMC is as follows:
1. Request an account on the O2 by sending mail to newmedia@virginia.edu. Be sure to include your full name, email ID, home phone number, and the course and instructor name for the class for which you are doing the video work. An account is good for only the semester in which it is created.
2. Call the New Media Center (243-6300) to schedule time on Lucy, the O2. You may schedule up to 12 hours in any week on Lucy. You may schedule for one week in advance, as well. If you fail to show up within 15 minutes of your scheduled time, your appointment is cancelled, and Lucy may be used by a walk-in client. Repeated failure to show up for scheduled appointments will result in your O2 privileges being
Document Done

**Figure 32-5:** Are these paragraphs or blockquotes? You'd have to view the source to find out.

Applying a style sheet to a page with paragraphs formatted with the blockquote element can have unpredictable and unattractive results.

# Predictability

No one really likes surprises. Elements of your page should behave the way visitors expect. Don't format text in blue with an underline, because it will look the way visitors expect links to look, but won't link. Don't create button-looking designs with text in your graphic unless your graphic is also an imagemap. On the other side of the coin, don't format your links to be the same color as your other text or visitors won't know to click them. Also, while subtlety is nice, don't make the buttons on your imagemaps so subtle that no one would think to click them.

The Web is a fabulous platform and is unique among platforms because your visitors don't have to learn to use a new interface to view your material. In the olden days, before the Web, every software program had its own interface. This meant users of the software had to learn new interfaces every time they wanted to use new software. With the Web, if you give users what they expect, the interface is a nonissue for you. Take advantage of it.

# Navigability

Because this is the tactics chapter, this is where you need to think about how you are going to implement them within your page design. Earlier in this chapter, some attention was devoted to navigational controls. Which ones should you use? How much screen real estate should you devote to them?

You certainly need to use *some* navigational controls. The simplest kind to use is a navigation bar or navigation buttons. Other options include a table of contents, site searching, and site maps.

## Navigation bar or navigation buttons

The simplest kind of navigational tool to use is the *navigation bar.* A navigation bar can be either text, text in a table, or an imagemap. The navigation bar should appear on every page in the same place or places. Many sites use frames to keep the navigation bar or buttons stationary while the content and links move into and out of a different frame. The navigation bar with text in a table, shown in Figure 32-6, is in a different frame from the content on the right. Figure 32-7 shows a navigational bar used with an image map.

Jump to Chapter 22 for a refresher on the pros and cons of using frames.

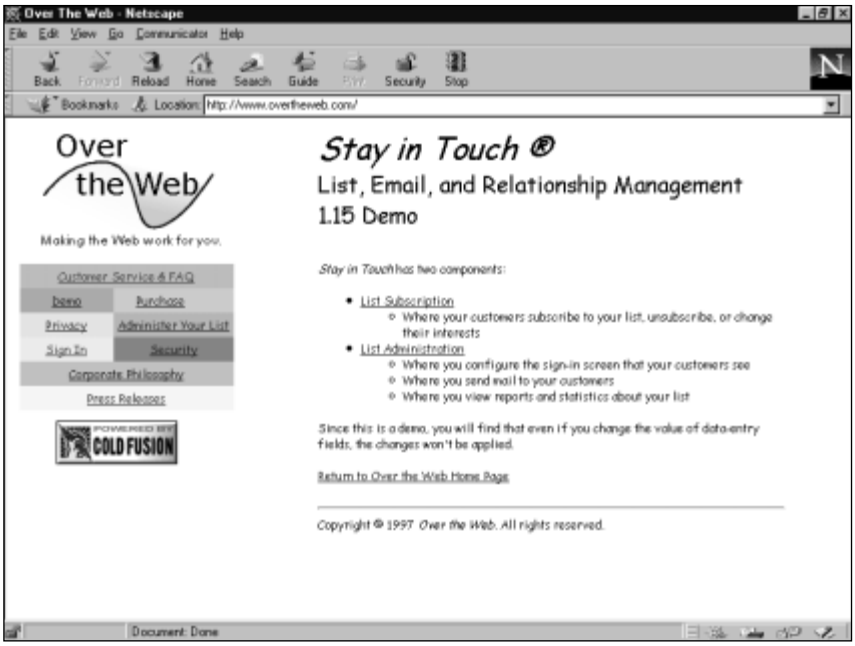
Over The Web - Netscape
File Edit View Go Communicator Help
Back Forward Reload Home Search Guide Print Security Stop
Bookmarks Location: http://www.overtheweb.com/
Over the Web
Making the Web work for you.
Customer Service & FAQ
Demo
Purchase
Privacy
Administer Your List
Sign In
Security
Corporate Philosophy
Press Releases
POWERED BY COLD FUSION
Stay in Touch ®
List, Email, and Relationship Management
1.15 Demo
Stay in Touch has two components:
List Subscription
Where your customers subscribe to your list, unsubscribe, or change their interests
List Administration
Where you configure the sign-in screen that your customers see
Where you send mail to your customers
Where you view reports and statistics about your list
Since this is a demo, you will find that even if you change the value of data-entry fields, the changes won't be applied.
Return to Over the Web Home Page
Copyright © 1997 Over the Web. All rights reserved.
Document: Done

**Figure 32-6:** Over the Web uses a navigation bar with text in a table.

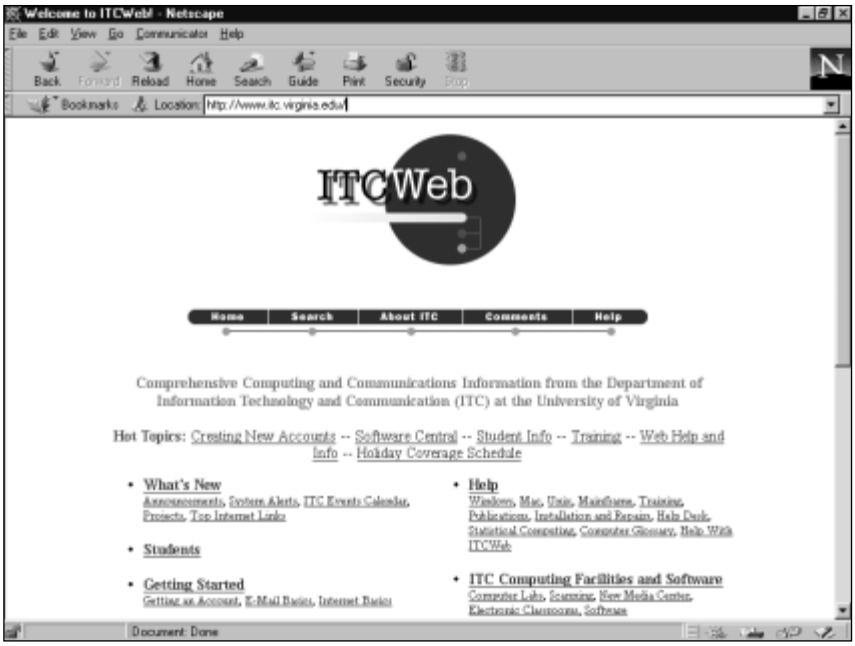
Welcome to ITCWeb! - Netscape
File Edit View Go Communicator Help
Back Forward Reload Home Search Guide Print Security Stop
Bookmarks Location: http://www.itc.virginia.edu/
ITCWeb
Home
Search
About ITC
Comments
Help
Comprehensive Computing and Communications Information from the Department of Information Technology and Communication (ITC) at the University of Virginia
Hot Topics: Creating New Accounts -- Software Central -- Student Info -- Training -- Web Help and Info -- Holiday Coverage Schedule
What's New
Announcements, System Alerts, ITC Events Calendar, Projects, Top Internet Links
Students
Getting Started
Getting an Account, E-Mail Basics, Internet Basics
Help
Windows, Mac, Unix, Mainframe, Training, Publications, Installation and Repairs, Help Desk, Statistical Computing, Computer Glossary, Help With ITCWeb
ITC Computing Facilities and Software
Computer Labs, Scanning, New Media Center, Electronic Classroom, Software
Document: Done

**Figure 32-7:** The University of Virginia uses a navigation bar with an imagemap.

**Definition**

Frames. Frames are a way to have two different HTML files open at the same time in the browser. You can divide your browser page either vertically, horizontally, or both. Frames keep your visitor grounded because only part of the browser gets updated most of the time, which leads to faster page loading.

You are likely to see text navigation bars on the *text-only* version of a site, but you can certainly put them on all versions of the site. They look like this:

```
[Home][Support][Service][Sales][Contact Us][Feedback]
```

Each item within the square brackets is a hyperlink to that area of the site. A text navigation bar should go on its own line and should appear in the same place on every page.

## Table of contents

Having a table of contents (TOC) only one click away can be a lifesaver for your visitor. This can also save you valuable screen real estate as a designer. A site map and a TOC should contain basically the same information, but a TOC is usually text-based, whereas a site map is usually graphical. You can implement a TOC in two ways — the easy way and the elegant way.

### Text-only sites

Should you create a text-only version of your site? Yes. Every site should have a text-only version to allow maximum access even to people whose Internet connections involve cups and a string. Is that realistic? No.

If you have the resources to maintain a text-only site, great. But for most Webmasters, who are struggling just to keep the primary Web site up-to-date and keep up with emerging technologies, it is simply not realistic.

Why maintain a text-only site? Faster access for people with slow Internet connections who have never heard of turning off the graphics, and for people using Lynx browsers, who can't see graphics.

Why not maintain a text-only site? Time, energy, and expense.

What alternative do you have to providing a text-only site? You can do several things to increase downloading speed and they are all discussed later in this chapter. In addition, there are things that will make a page heavily dependent on graphics useful to a visitor who arrives with image loading turned off. Watch for the `alt` attribute to elements throughout this book.

### The easy way

Even if you choose to implement the TOC the elegant way, you still need to implement it the easy way for people who have old browsers. In the easy way, every page in your site has a button or part of the navigation bar that links to a separate page where the TOC resides.

If the TOC is large, then you want to have all the major headings near the top of the page with links to the details later in the same page. If you can, try to keep the short list at the top of the page only one screen long.

If the TOC is not that long, just list all the pages. You probably want to have the names of the pages in the TOC correspond with the titles of the pages. You certainly want every page name in the TOC to link to the corresponding page in your site.

If the page names, or if only a few page names, aren't adequately descriptive, include a brief description under those page names. Use the brief description only if it increases clarity; you needn't do it for every single page.

### The elegant way

Using JavaScript and the Document Object Model, collectively known as dynamic HTML, you can create an incredibly rich, interactive table of contents that can make your site look like a million dollars. Of course, this only works on browsers that support HTML 4, but you can use another line or two of JavaScript to check to see what browser your visitor is running and implement the easy way for those who can't see your work of art in dynamic HTML.

Document Object Model (DOM). A set of rules that, when implemented by browsers, give you, the designer, incredible access to the elements on your Web page. Formerly, if you wanted to have JavaScript change the color of your text, you had to reload your page; with the DOM the change to text color can happen when the user clicks a radio button or a check box. You can create dynamic forms, where the next field on the screen appears in response to the information entered in the previous field. The DOM empowers the designer enormously and saves the visitor from page reloads and multiple screens. This is so exciting and important, Part VII is devoted to it.

## Site map

Site maps can be useful, and Chapter 36 has in-depth coverage of them. You want to be careful how much detail you include in your site map, which should be an imagemap, as well. If you include too much detail either it will take a long time to load, because the graphics file will be enormous, or the text will be tiny and difficult to read, or both.

## Site mapping tools

There are site mapping tools and there are site mapping tools. Most often when one hears about site mapping, it is about mapping the site from a Webmaster's perspective: Do all the links work? Where are the files physically located? This is not the kind of site map a visitor to a site needs. In addition, tools that map sites for purposes of site management rarely produce Web-quality digital images that make sense to the visitor. Two different approaches you can take to create a site map for the Web visitor are demonstrated by Microsoft Organization Chart and Dynamic Diagrams' MAPA Service.

On the low end is Microsoft Organization Chart. This is an easy tool to use to create attractive site maps, but you have to do all the work yourself. If you have PowerPoint installed on your computer, then you already have it. Whenever you change your site, you must remember to update your site map published with the new version. This product only works for small sites. The amount of energy required to maintain the site map for sites developed by the team would soon outstrip the economy of the initial software price.

On the high end is Dynamic Diagrams' MAPA Service. This is written in Java and lets your Web site map itself. Because it is a service, there is no software to purchase, upgrade, or install. You always get the most recent version of the product. MAPA creates a 3D animated map, a Java applet, that runs on the Java-enabled browsers of your visitors. The MAPA service is priced based on the size of your site. You pay a monthly fee for either daily or weekly mappings. The price is so low that if your site is over 100 pages, you shouldn't even consider creating and maintaining the site map yourself. The applet it creates is so smooth and well designed, it solves all your navigation problems. Definitely look at it at `http://www.dynamicdiagrams.com`.

## Site search

Some sites include a search field on every page; some link to a search page. If your audience is sophisticated enough to know how to use the search field and you can spare the space on your page, then go ahead and put the search field on every page. If your audience is likely not to be too technically sophisticated or you want to give them more information about searching, then link to a separate page for entering search terms. In either case, you need either a separate page or a separate frame for search results. On the back end, you need to be sure your server has a search and index program running or your visitor's search will never return any results.

## Site drop-down list

This is a clever item to add to your arsenal of navigational tools. Using a drop-down list, you can give your visitors the power to link anywhere on your list with just one click. The list can be as long as you want. The drop-down list (called a *select list* in HTML) takes up little screen real estate, so it is a double value.

Make sure your visitors understand the drop-down list is another navigational tool. Otherwise, the value is wasted. Visitors to your site—especially inexperienced users—may need a little direction.

# Visual Appeal

Beautiful pages are not that plentiful on the Web. What do people find beautiful on a page? The same things that are beautiful on a brochure: clean lines, smooth shapes, and complementary colors. In 1765, Edmund Burke, the English political philosopher, wrote *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful.* This short book (less than 200 pages) about what we find beautiful is as accurate today as any book you can find on creating graphics for electronic delivery. Nothing has changed. Beauty is timeless.

You are receiving a lot of design suggestions in this chapter. You might be wondering how you can fit all these things into just one page and *still* have room for the content or the links. Try to incorporate as many guidelines as possible into your page. The page shown in Figure 32-2 meets every test of good design in this chapter and it looks like it isn't even trying. Good design is like that. Great athletes make their feats look effortless; good design works the same way. At the end of this chapter is a checklist you can use to make sure your pages have the essentials of good design for the Web.

# Interactivity

Your visitors expect almost every page to have some level of interactivity. For links pages and the Welcome page, this is easy. That is really all they do. For content pages, however, visitors also expect to be able to interact with your site. You can include interactivity by using hyperlinks and imagemaps to link both within and outside of the site. You can use dynamic HTML to have interactivity within your page. Forms are another way to provide interactivity.

# Speed

How much should you worry about speed? Worry may be too strong a word. Even though bandwidth is getting cheaper and more available, don't make the mistake of believing everyone accessing your page is on a T1 line (with fast access). You still should be considerate about the amount of data you expect them to download to see your page. Even though this book talks about *visitors to your site,* in fact, your site is *delivered to* the desktops of the people who request it in their browsers.

When you design your pages with huge graphics—background images that fill the screen, large image maps, graphical representations of text rather than text—you are telling your visitors you don't respect their time. Is this the message you want to send?

## The facts about Internet connections

T1, T3, dial-up, 56K, cable modem: what does it all mean in plain English? T1 and T3 are types of Internet connections used by those users willing to pay more for the faster connection—typically businesses, universities, and probably by your ISP, if you have one. The backbone of the Internet is T3. T1 transfers data at 1.5 Mbps. T3 communicates at between 3 Mbps and 45 Mbps (something you want to ask your ISP about if it claims to have a T3 line). When you have a dial-up connection to the Internet, your modem communicates with your ISP's modem at the speed of the slower modem. So even if you have a 56K modem, if your ISP has 28.8 lines, you communicate at 28.8. Some technologies, such as 56K modems and cable modems, use asymmetrical communication, which means download *from the Internet* is at one speed and upload *to the Internet* is at another speed. Download may approach the promised speed, but upload won't. This chart should help. It assumes the other end of the connection is at least as fast.

| *Type of Connection* | *Download* | *Upload* |
|---|---|---|
| 28.8K modem | 28.8K | 28.8K |
| 56K modem | 50K | 33.6K |
| cable modem (varied by modem) | 400K | 100K |
| T1 | 1MG | 1MG |
| T3 | 10MG | 10MG |

Of course, there is no guarantee you will ever communicate at the ceiling speed, which is what the table shows, but for purposes of calculation, you must assume something. An overloaded Web server could cut download speed by a factor of ten or more. The chart doesn't define *K,* which is 1,000 bytes per second or 1,000 characters per second, but what really matters is you see the relationship between the different connection speeds. If a page takes a moment to download for you when you are connected via a T1, it will take a long time to load for your visitors, who, you should assume, are probably at a slower connection speed.

# Design Guidelines

Good page design is a skill. If you know absolutely nothing about page layout and design, it'll show. If you are attempting to design a site for commercial use, it's probably best to hire a professional. You can learn it yourself, but you must expend some intensive time and effort. For those of you insistent upon doing page layout yourselves, here are ten things to remember:

1. Think of the underlying design as a *hanger.* Once you figure out what the basic design is, everything else *hangs* off it. If you don't have the hanger, you're going to be struggling with each element and it's going to drive you insane.

Look at Figure 32-2 again. The designer, Debra Weiss of drw Design (`http://www.cstone.net/~debra/drwdesign`), had this to say about it:

"I was struggling over the look and feel of this site for quite some time. I wanted it to look elegant, but I didn't want the design to get in the way of the functionality. Then, it struck me. When I was visiting the Colonnade offices, I remembered noticing several framed prints of Greek architectural drawings of temples and columns and admiring them. I was able to locate some wonderful digital artwork of this type — floorplans, pillars, columns, and colonnades. This concept became the hanger. Each section of the site has a different column that represents it. One of the page backgrounds is a screened-back floor plan. The headline font is Palatino, a classical font. The navigational icons are teeny column tops. The design just snapped into place."

2. Decide on an underlying grid structure and don't deviate. Look at any magazine or publication. Analyze how the text and graphics are aligned. Is it a one-, two-, three-, or four-column grid? For consistency, use the same number of pixels for horizontal spacing between text and images — at least 5 pixels.

3. Use real typographical marks. This is a subtlety, but it makes a subconscious impression on the reader. Most Web browsers display quotation marks like this: "hello." You want this: "hello." While not all browsers support these entities yet, ideally you can insert real typographical quotation marks using entities as follows:

```
“      =      &ldquo;
”      =      &rdquo;

‘      =      &lsaquo;
’      =      &rsaquo;
```

4. Decide on your color palette, and stick with it. If your colors are navy, burgundy, and cream, don't make your links green.

5. Anti-alias your display fonts. The mark of a professional site can sometimes be as simple as the look of the fonts.

6. Be target-aware. Many sites make the mistake of providing hundreds of links to other sites. It's hard enough to get people to come to your site — why send them away? If you link to other sites, use the `target =_blank` attribute-value pair to open the link in a new window. This way, visitors can return to your site easily. Opening links in a separate window also solves anomalies that occur when your site has frames and you link to a site that also has frames.

7. People read from left to right and from top to bottom. This seems obvious, but inexperienced designers seem to have trouble remembering this. Put your most important elements at the top left of the page. If you don't grab the reader's attention there, you're never going to get them to read more.

8. Think carefully about bells and whistles. Animations, marquees, DHTML, and so forth are all great, *when used in moderation.* Don't pull all your tricks out of the bag and plop them all on one page. If your content isn't good enough to stand alone, rethink it.

9. Use different font styles sparingly. A good rule of thumb is to pick two font families at the most. Use one for your headlines and subheads. Use the other for body copy.

10. Look at your site using the worst conditions possible. Get a copy of Netscape 2.0. Set your display to 600×480, 256 colors. Set your modem down to 14.4 or 28.8 and look at your site. Every page. If you can't stand it, redesign until it's acceptable. If your page looks great under the worst conditions, it'll shine under the best ones.

Does this mean you have to sacrifice design to keep pages loading quickly? Not necessarily. The important thing is you don't add gratuitous graphics if you can avoid it. If you need slow-to-load features on your site — as an example, Java applets can be very slow to load — then you want to do what you can to have them load without making the visitor wait for them. Just ignore this whole section if you are designing for an intranet where every visitor to your pages will have a reliably fast connection. There are environments where you don't have to worry about these things. For the rest of us: things can be done to speed the delivery time of your pages. But first you need to understand what slows the loading of your page.

Slow modems and large graphics are the biggest offenders. Because you can't control the modem speed of your visitor, you have to do what you can on your end to make sure your page won't take an unreasonably long time to download. The only control you have is to control the size of graphics on your page. By using intelligent compression on your images and by using multiple small images with white space around them (rather than one large image), you can reduce the size of the files your visitor has to download, thus reducing the download time.

Chapter 37 explains all these concepts and more.

Without getting a Ph.D. in Digital Art, the following guidelines can help you make intelligent decisions about how to show you respect the time of your visitors:

1. Reduce the number of graphics files on your pages. Simple enough. Decide what you need (element-wise) on your page and see how you can convey the information you want to convey without using graphics. Two no-brainers: Don't use custom bullets in a bulleted (unnumbered list), or if you feel you absolutely *must* use custom bullets, use only one bullet graphic for every bullet in your site; and don't create custom Go or Submit buttons.

2. Reduce the size of graphics files. You can do this two ways: reduce the dimensions of the file (height and width) before you publish it, or reduce the bit depth of the images (the amount of color information the file carries). You can also use a trick under certain circumstances to load a tiny file and show a full-sized file. If what you want to do is show some pattern of colors, create the file as a tiny version of the image you want and use the height and width attributes of the object element or the image element (whichever you prefer) to *stretch* the file to the dimensions you want.

Check out GIF Wizard at `www.gifwizard.com`. This is a Web-based utility that analyzes and shrinks your GIFs and JPGs.

GIF or JPG? For additional information, check out the collection of excellent articles on the Microsoft Site Builder site at `http://msdn.microsoft.com/workshop/design/color/default.asp`.

**3.** Don't use a background image. Or, if you absolutely must, then use a tiny background image that tiles well. See Figure 32-8.

Chapter 28 discusses the use of background images at length.

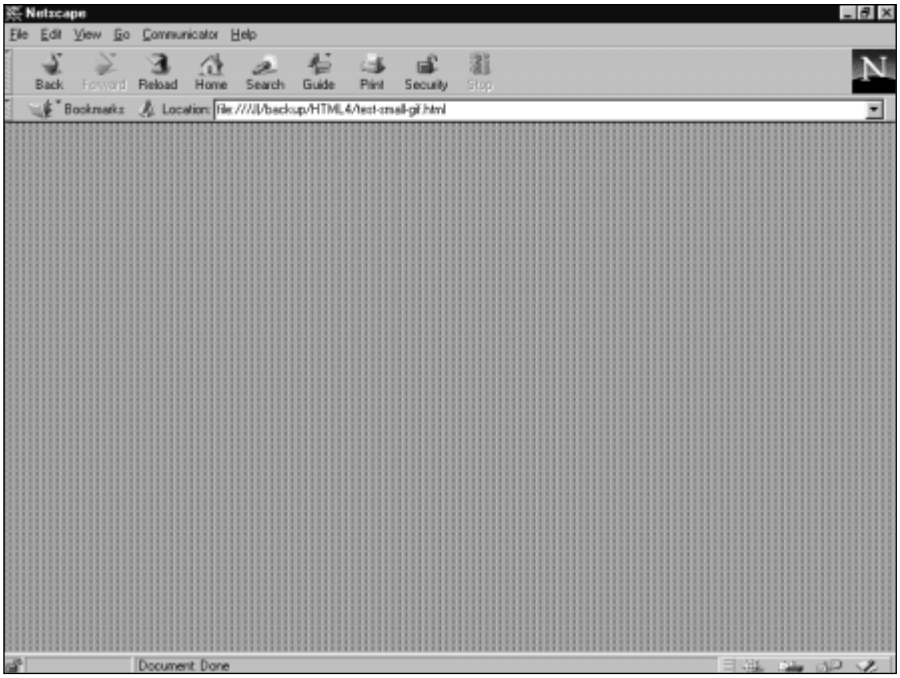
Netscape
File Edit View Go Communicator Help
Back Forward Reload Home Search Guide Print Security Stop
Bookmarks Location: file:///I|/backup/HTML4/test-small-gif.html
Document Done

**Figure 32-8:** The background image on this page is a 6×6-pixel file.

**4.** Use text when you can use text. What a concept! Next time you have your word processor open, if you use Windows 95, Windows NT, or higher, click the list of fonts available to you. Unless you installed some fancy fonts package, you have the base install of fonts. These same fonts are available to everyone else on the Web who is browsing from either Windows 95 or Windows NT (your results will vary on a Mac or on UNIX). Is this huge list so limiting, you have to re-create text in a graphics package and load it as an image? Get real!

You can create nice bullets using symbol fonts, such as Wingdings. To figure out what keystrokes to use to insert into your file, use the Windows Character Map, found under Accessories. If you don't have this installed, you should. Don't do this if you expect a significant number of visitors to come to your page from Macs. Macs don't have Wingdings as an installed font and what they see will be unpredictable.

# Effective Use of White Space

White space has the most remarkable effect on a page's design. It improves it immeasurably. When you are designing, make sure you allow plenty of it. When you have a lot of white space, you can include the same information (sure, the page will be longer) without creating the feeling of frenzy and chaos that permeates the Web. White space is relaxing. White space doesn't have to be white. If your background is pale powder blue, then your *white space* is really *blue space*.

White space. Uncluttered space on the page. Margins around text and images is white space.

You can use white space to draw attention to a title, a heading, or even a list. Why do you suppose a bulleted list draws your eye? White space contributes to the effect. When in doubt, use white space to break up your design.

# Optimum Page Length

Forget about the idea that your entire page needs to fit into one screen without scrolling. What you really must do is to make sure what you do see looks complete. How can you tell how much will fit into a screen? Don't assume all your visitors are running their browsers the way you are. The following section on testing walks you through all the ways you need to test your design to make sure visitors see what looks like a complete page.

More important than the page length is the page content. You don't want to break up your content into annoyingly small bites just to have everything fit into one screen. Frames can help you maintain the sense of completeness so even if visitors have to scroll, they won't lose their grounding.

What you want to avoid at all costs is horizontal scrolling. Do not make your visitors pan across your page to see your content. If you design your pages with a width of 550–600 pixels, you avoid this.

# Future Expandability

You mean there'll be more? Definitely. Assume your site will never go away. It will continue to grow. Paying close attention to the site architecture and site organization, as we'll cover in Chapter 36, and to navigational controls as previously described, takes you 80 percent of the way toward having an infinitely expandable site. Creating effective page shells and applying them with discipline takes you the rest of the way.

# Designing an Effective Welcome Page

However you decide to organize your site and the content on the pages within your site, you need a Welcome page. The *Welcome page* is the first place visitors see when they come through the front door of your site. As discussed previously, some visitors will come to your site through other doors.

What should you have on a Welcome page? Just enough. Look again at Figure 32-2, because a picture really is worth a thousand words. Just enough to convey a sense about who put up the site. Just enough to get you heading in the direction of the content.

# Splash Screens

What about splash screens? *Splash screens* are pages that appear before the Welcome page. They can also be called *entry tunnels*. Usually all they do is enable you to pass through to the Welcome page. There is just one link on a splash screen and it takes you to the Welcome page.

The theory behind the splash screen is you have the visitors' complete attention and you can use this moment to create one strong impression (whether this impression is that you have a great logo or graphic artist or you are wasting their time with slow-loading graphics is hard to say). If you are going to use a splash screen, which is of arguable value — how much attention is the loss of goodwill worth? — then at least look around the Web and find some nice ones. Make sure your splash screen fits into one screen on all browsers at all screen resolutions; this is no time to scroll.

# Testing

The importance of testing your page design cannot be emphasized enough. Look at it in all browsers on all platforms at all screen resolutions you can possibly conceive of your visitors using. Subtle differences exist between browsers and you can't assume things will look the same. If you are one who spends weeks at the

paint store trying to find just the right shade of paint for your room, then you will waste a lot of time playing with colors in your design only to learn that what looks like a beautiful, rich burgundy on one screen is brown on another and purple on yet another.

Looking for information about the Web-safe palette? An excellent article is at `http://msdn.microsoft.com/workshop/design/color/safety.asp`.

# The Myth of Completeness

Never, never, never say *under construction*. The entire Web is under construction. If it is complete enough to publish, publish it; otherwise, don't. In the process of writing this book, dozens of professional Web developers were contacted for permission to use their materials in the figures throughout these pages. Probably half of them said something about how the screen captures shouldn't be taken until they had fixed just one more thing they didn't like. You will never be entirely satisfied with your page. You will always want to do more. If it is so embarrassing you have to tell people it is under construction, then you probably shouldn't publish it yet.

Along the same lines, don't be afraid to retire pages. Don't leave old junk up there if it is no longer attractive or accurate. Run link-checking software right away to make sure all your links still work. Because others will retire their own pages occasionally, you'll want to run link-checking software regularly to be sure your external links aren't broken either.

# From Here

Jump to Part VII and learn about the most exciting thing going on with the Web: Dynamic HTML.

Jump to Chapter 37 and get an intensive course in graphics.

# Summary

Page design requires balancing visual appeal against speed, consistency, predictability, easy navigation, and a host of other things. Getting distracted is easy when you are involved in the design process. Remember, this is just a step on the way to publishing your site. If you continually change your design, you'll never get your site published. The HTML 4 Way supports the separation of content from presentation that can help keep you focused. Finally, test, test, test your design to make sure all visitors, no matter where they come from, have a positive experience on your site.

✦ ✦ ✦